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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,873	12/26/2000	Seoung-Young Lee	P-136	2230

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FLESHNER & KIM, LLP
P.O. BOX 221200
CHANTILLY, VA 20153

EXAMINER	
PHAN, TRI H	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No.	Applicant(s)	
	09/745,873	LEE, SEOUNG-YOUNG	
	Examiner	Art Unit	
	Tri H. Phan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 24-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-7 and 28* is/are allowed.

6)☐ Claim(s) *8,9,17,20,24-27,29-32 and 34* is/are rejected.

7)☒ Claim(s) *10-16,18,19,21-22 and 33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment/Arguments

1. This Office Action is in response to the Response/Amendment filed on June 12th, 2006. Claim 23 is now canceled and new claims 33-34 are added. Claims 1-22 and 24-34 are now pending in the application.

Claim Objections

2. Claims 20, 28-31 and 34 are objected to because of the following informalities:

Regarding claim 20, line 11, currently read as "...transmit data on a first channel when an occupied state of the first channel is released." is unclear to which channels it compares to (e.g. second channel, third channel, etc.). Examiner believes it should be -- ... a first available channel ... of the first available channel ... --.

Claim 34, line 3, the term "first channel" is objected for the same objection's reason given in Claim 20.

Claim 28, line 1, the word "a" in front of "terminal" should be correct to -- the -- for clarity.

Same objection's reason as given in claim 28 for claims 29-30 with the word "a".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-9, 17, 20, 24-27, 29-32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by **Han, Jong Sun** (U.S.6,973,062; hereinafter refer as '**Han**').

- In regard to claim 8, **Han** discloses, *a method for transmitting packet data by dynamically allocating channels in a communication system comprises*

providing channel availability information ('busy or idle field'; for example see col. 1, lines 57-59; figure 2; col. 4, lines 1-2, 38-41) *for each of a plurality of channels, the channel availability information being provided from a base station to each of a plurality of terminals such that each of the terminals receives the channel availability information of each of the plurality of channels* (for example see figures 3-4; col. 4, line 55 through col. 5, line 18; wherein the Walsh code classes are transmitted to all the mobile terminals with the busy/idle bit values set for each code class and where different code classes supports different service options, e.g. "*plurality of channels*", as disclosed in col. 5, lines 19-25);

for each of the plurality of terminals, monitoring, the channel availability information for each of the plurality of channels; determining which, if any, of all of the plurality of channels is in an occupied state using a corresponding plurality of PN codes (for example see figures 3-4;

col. 4, line 55 through col. 5, line 18; wherein each mobile terminal identifies, e.g. "*monitoring*", the state of the Walsh code resource of each code class, e.g. "*each of the plurality of channels*", and determines the state of the channel is busy or idle through the busy/idle bit); *and*

one of transmitting a data packet through a dynamically allocated unoccupied one of the plurality of channels for transmission, and monitoring each one of the plurality of channels to determine when the occupied state of one of the channels is released, if there is no channel in the unoccupied state (for example see col. 5, lines 10-18).

- Regarding claim 9, **Han** further discloses about *simultaneously multiplying the PN code for each channel by a signal received from a base station* (wherein, it is inherently the PN code is multiplied to the signal for modulating/demodulating in CDMA system).

- In regard to claim 17, **Han** discloses, *a method for informing a plurality of terminals of an occupied or unoccupied state* ('busy/idle bit') *of a plurality of channels of a CDMA system* (for example see col. 1, lines 50-59) *comprises*

providing a unique PN code ('Walsh code') *for each of the plurality of channels used in the CDMA system, the unique PN code being provided from a base station to each one of a plurality of terminals in communication with the base station such that each of the terminals receives the unique PN code for each of the plurality of channels* (for example see col. 4, line 65 through col. 5. line 11); *for each of the plurality of terminals, monitoring, each of the plurality of channels to detect a signal that indicates an idle channel* (for example see col. 5, lines 10-18; wherein each mobile terminal receives and determines, e.g. "*monitoring*", the state of busy/idle

of each Walsh code class and where each mobile terminal supports different code classes, e.g. "*plurality of channels*", based on the service options as disclosed in col. 5, lines 19-25); *transmitting a power control signal over an occupied channel using the PN code of the occupied channel* (for example see col. 1, lines 50-59)*; and transmitting an idle signal* ('idle bit') *over the idle channel using the same PN code as the idle channel* (for example see col. 1, lines 50).

- Regarding claim 20, **Han** discloses, *a method of allocating a plurality of channels in a CDMA packet data system comprises*

receiving channel availability information ('call access control information') *for each of the plurality of channels from a base station such that each of a plurality of terminals receives the channel availability information of each of the plurality of channels* (for example see step S2 in figure 4; col. 5, lines 10-18; wherein each mobile terminal identifies the state of the Walsh code resource of each code class and wherein each code class, e.g. "*plurality of channels*", being assigned based on the service options as disclosed in col. 5, lines 19-25);

dynamically allocating an available channel and transmitting a data packet to the base station using the allocated channel (for example see steps S3-S6 in figure 4; col. 5, lines 15-18); and

receiving from the base station a power control signal on the allocated channel (for example see step S1 in figure 4; col. 1, lines 50-56),

wherein the plurality of terminals are configured to simultaneously monitor channel availability information for each of the plurality of channels of the base station and transmit

data on a first channel when an occupied state of the first channel is released (for example see col. 5, line 10-18).

- In regard to claim 24, **Han** further discloses about *establishing in a base station the plurality of channels for data communication, each one of the channels having a unique PN code* ('Walsh code'; for example see col. 4, line 65 through col. 5, line 3); *receiving from the base station the unique PN codes of each of the plurality of channels and monitoring each of the plurality of channels to determine and occupy the state of each respective channel* (for example see col. 5, lines 10-12).

- Regarding claim 25, **Han** discloses, *a method for allocating a plurality of channels comprises monitoring each of the plurality of channels and determining, by the mobile terminal, an available channel from all of channels from the base station when the mobile terminal determines the occupied state of the one of the plurality of channels is released* (for example see figures 3-4; col. 4, line 55 through col. 5, line 18; wherein each mobile terminal identifies, e.g. "*monitoring*", the state of the Walsh code resource of each code class and where each mobile terminal supports different code classes, e.g. "*plurality of channels*", based on the service options as disclosed in col. 5, lines 19-25); *and transmitting, by the mobile terminal, data over the available channel* (for example see col. 5, lines 15-18).

- In regard to claim 26, **Han** further discloses, *transmitting from the base station to the mobile terminal a state signal* ('busy or idle field'; for example see col. 1, lines 57-59; figure 2; col.

4, lines 1-2, 38-41) *indicating whether the at least one channel of the at least one other mobile terminal is available or unavailable for transmission* (for example see col. 4, line 65 through col. 5, line 9).

- Regarding claim 27, **Han** further discloses, *transmitting from the base station to the mobile terminal all of the PN codes* ('Walsh codes') *used by the base station* (for example see col. 4, line 65 through col. 5, line 9).

- In regard to claims 29-32, **Han** further discloses, *wherein the mobile terminal is not pre-allocated to a specific one of the plurality of channels* (for example see col. 5, lines 19-25; wherein each mobile terminal supports a range of code classes, e.g. "*not pre-allocated to a specific one of the plurality of channels*").

- Regarding claim 34, **Han** further discloses, *wherein the plurality of terminals are configured to simultaneously monitor channel availability information* ('call access control information') *for each of the plurality of channels of the base station and to transmit data on a first channel when an occupied state of the first channel is released* (for example see col. 5, lines 10-18).

Response to Amendment/Arguments

5. Applicant's arguments filed on June 12th, 2006 with respect to claims 17, 20, 25 and 33-34 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

6. Claims 10-16, 18-19, 21-22 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park et al. (U.S.6,728,233) is cited to show device and method for improving packet data process in the mobile communication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tri H. Phan
August 17, 2006

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER